

Notic of Allowability	Application No.	Applicant(s)	
	10/615,549	YUNKER ET AL.	
	Examiner	Art Unit	
	Linh M. Nguyen	2816	

-- The MAILING DATE of this communication app ars on th cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicants' filing on 07/08/2003 and preliminary amendment filed On 01/28/2004.
2. ☒ The allowed claim(s) is/are 1-25.
3. ☒ The drawings filed on 08 July 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>05/27/04</u> . 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
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DETAILED ACTION

This is a reply to the Applicants' filing on 07/08/2003 and a preliminary amendment submitted on 01/28/2004. By virtue of the preliminary amendment, claims 1-25 are currently presented in the instant application.

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it must be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Applicants' representative, Peter C. Knops, on 05/26/2004.

The Examiner's Amendment includes:

A. CLAIMS:

Claim 10, line 15 (last line), change "unit" to --integrated circuit--;

Claim 19, line 3, insert --processing-- in front of "chip";

Claim 23, line 3, insert --processing-- in front of "chip"; and

Claim 25, lines 3 and 4, delete "about".

B. ABSTRACT:

Lines 2 and 5, replace "means" with --device--.

Allowable Subject Matter

2. Claims 1-25 are allowed.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

The closest prior art fails to disclose or fairly suggest

a) A signal pathway including a fourth signal line formed on a circuit board having a first end electrically connected to a third signal line at a second pad, and a second end forming a termination, in combination with the remaining claimed limitations, as called for in claim 1; or

b) A signal pathway including a first integrated circuit signal line extending into a package from a signal-in pad disposed on a surface of a circuit board, the first integrated circuit signal line forming a stub extending at least to an interface of the die and the package, in combination with the remaining claimed limitations, as called for in claim 10; or

c) A signal pathway including a third signal line formed in a circuit component, the third signal line extending from a signal-in pad electrically connected to a first terminal to a signal-out pad electrically connected to a second terminal; and a stub electrically connected to a second signal line on the circuit component, in combination with the remaining claimed limitations, as called for in claim 13; or

d) An electronic system including a third signal line formed on a circuit component, the third signal line extending from a signal-in pad electrically coupled to a first terminal at a circuit board interface to a signal-out pad electrically coupled to a second terminal at the circuit board

Art Unit: 2816

interface; and a stub electrically coupled with the third signal line on the circuit component, in combination with the remaining claimed limitations, as called for in claim 18; or

e) A method for routing a clock signal including a step of providing a signal pathway having a third signal line formed on the circuit component mounted to a circuit board, the third signal line extending from a signal-in pad electrically coupled with a first terminal to a signal-out pad electrically coupled with a second terminal; and a stub electrically coupled with the third signal line on the circuit component, in combination with the remaining claimed limitations, as called for in claim 22.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh M. Nguyen whose telephone number is (571) 272-1749. The examiner can normally be reached on Alternate Mon, Tuesday - Friday from 7:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2816

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Linh M. Nguyen
Examiner
Art Unit 2816

LMN

A handwritten signature in black ink, appearing to read 'Linh M. Nguyen', with a long horizontal flourish extending to the right.